

WHAT IS CLAIMED IS:

1. A quick attachment system using two hitch points where:

(a) the first hitch connection containing a guide to align and connect the implement hitch point to the corresponding hitch point on the receiver,

(b) a second hitch connection where the implement hitch point and the corresponding receiver hitch point are aligned by means of rotational, translational, or a combination motion of the implement and by the connection of the first hitch point.

2. A hydraulic means of providing motion to the implement to align the second hitch point.

3. A spring means of providing motion to the implement to align the second hitch point.

4. Any of various means of automatically coupling the hitch points when aligned including spring-loaded pins, and latches.

5. In a snowplow attachment system for quickly attaching a snowplow and snowplow frame to a vehicle, said system including a vehicle mounted frame attachment permanently secured to the vehicle frame, said vehicle mounted frame having a pair of lug plates joined by a

transfer frame member, each said lug plate having an arcuate hook slot and a latch pin aperture, said snowplow frame having a subframe and a vertically extending lift/light tower pivotally connected at its lower end by a horizontal pivot to the trailing end of said subframe, a hydraulic piston and cylinder assembly pivotally connected at its ends to (1) an upper end of said vertically extending lift/light tower and (2) a point on said subframe spaced forwardly of said horizontal pivot, a hydraulic pump on one of said subframe and vertically extending lift/light tower and connected to said hydraulic piston and cylinder, an electrical motor for driving said hydraulic pump, a transverse attachment bar for engaging said arcuate slot and being guided to the hook portion of said arcuate slot, and spring-bias latch pin members for engaging said latch pin apertures, respectively, the improvement comprising:

an electrical switch on said vertically extending lift tower for engaging said hydraulic pump motor and operate said hydraulic piston and cylinder to rotate said vertically extending lift/light tower about said horizontal pivot and cause said transverse attachment bar to enter said hook slot of said pair of lug plates, and

a pair of trip mechanisms for actuating said spring-bias latch pins to cause said latch pins to enter said latch pin apertures when said transverse attachment bar has engaged the hook portion of said slot.

2. The attachment system defined in Claim 1  
including ~~a member~~ means to limit rotation of said lift/light tower  
toward the vehicle and force alignment of latch pins with  
said latch pin apertures.

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